

IN THE SPECIFICATION

Please amend paragraph 41 as follows:

In the embodiment of FIG. 2, the implantable defibrillation system includes a first defibrillation electrode 50 configured for positioning in the right atrium (R-A) 36 or superior vena cava 48. Also illustrated in sectional view is the interior of the right ventricle (RV) 32, along with the exterior of the left atrium (LA) 38 and the exterior of the left ventricle (LV) 34. A second defibrillation electrode 52 is configured for positioning in the distal coronary sinus (DCS) 42 or great cardiac vein 44. A pulse generator which is part of the electronic circuit 15 enclosed in the implantable housing 13 is connected to and couples the first pair of electrodes ~~51~~ (50, and 52) via leads 20, 24. Thus, a first pair of electrodes ~~51~~ 50 and 52 thereby provides a first current pathway ~~53~~ for delivering a first defibrillation pulse therebetween.

Please amend paragraph 42 as follows:

A second pair of electrodes are disposed to provide a second current pathway ~~55~~ different from the first current pathway ~~53~~. As illustrated in FIG. 2, a second pair consisting of a third electrode 58 and a fourth electrode 60. As illustrated, the third electrode 58 may be configured for positioning in the proximal coronary sinus (PCS) 42 and the fourth electrode 60 is configured for positioning in the left pulmonary artery (LPA) 45. A second pulse may then be generated by the pulse generator and delivered via leads 20, 24 to be delivered by the, electrically coupled or paired PCS and LPA electrodes 58, 60.

Please amend paragraph 53 as follows:

The controller 74 may also signal a drug delivery system which may include an osmotic pump 133 located at one end of a catheter to drive therapeutic agent into the heart tissue or bloodstream via the catheter or by using a needle. A hollow helix fluid transport system can be employed as known in the art. The calcium channel blocker, calmodulin blocker, calmodulin kinase inhibitor or antiarrhythmic drug may be delivered via a fluid pathway system and into a drug reservoir. The reservoir may be loaded before, during, or after implantation from the proximal end of the drug delivery catheter. Once advanced into the heart tissue, diffusion of the liquids across the semipermeable membrane may occur because of an osmotic salt. The calcium channel blockers may be advanced into the heart or

bloodstream at any time during a fibrillation or arrhythmia, but preferably before ~~and~~ a defibrillation threshold shock.

Please amend paragraph 55 as follows:

Alternatively, implantable pumps such as those used for administering insulin as well as other chemical compounds may be used as known in the art. These pumps may employ an implantable sensor and drug delivery pump system. These systems are known to incorporate sensors to perform analysis of blood as well as electrical signals from a subject's heart in order to know at what time period chemical reagents are injected into a subject's body. Typically, these reagents periodically need to be replenished, which imposes the requirement of access below the surface of the skin through which fresh reagents must be injected from time to time. FIG. 4 depicts possible embodiments of the invention. Specifically, an injector 90 is shown as part of the control system. A calcium channel blocker, calmodulin blocker, calmodulin kinase inhibitor or antiarrhythmic drug may be placed into the injector when the device is produced, or through a wire or catheter 92 that can be connected to a system outside of a subject's body. Alternatively, a ~~the~~ catheter 94 may be used to inject the calcium channel blocker or drug directly into the bloodstream rather than through the device.

Please amend paragraph 59 as follows:

Another embodiment of a defibrillator 110 is illustrated in FIG. 4. FIG. 4 depicts implantable housing 113 that may contain a hermetically sealed electronic circuit 115 (see FIG. 5). The housing includes an electrode comprising an active external portion 116 of the housing, with the housing 113 preferably implanted in the left or right thoracic region of the patient (*e.g.*, subcutaneously or submuscularly, in the left or right pectoral region, or subcutaneously or submuscularly in the left or right (preferably left) abdominal region; the left pectoral region is most preferred) in accordance with known techniques as described in G. Bardy, U.S. Pat. No. 5,292,338.

Please amend paragraph 60 as follows:

The system includes a first catheter 120 and a second catheter 121, both of which are insertable into the heart (typically through the superior 148 or inferior vena cava) without the need for surgical incision into the heart. Each of the catheters 120, 121 contains electrode leads 120a, 120b, 121a, respectively. As illustrated in FIG. 4, the system includes an

electrode A; 150 that resides in the superior vena cava or innominate vein, an electrode B; 151 positioned in the right ventricle, and an electrode C; 152 positioned within a vein on the postero lateral surface of the left ventricle (e.g., in the apical third of the posterior cardiac vein or the apical half of the great cardiac vein). The active external portion of the housing 116 serves as a fourth electrode D. Designations "A" through "D" herein refer to electrodes in the aforesaid positions. The catheters may also be attached to any variety of drug delivery systems contained within the implantable housing 113.